

## IR IP MG PTZ CAMERA

The World's First 360°Endless PAN/TILT Motion Full HD(1080P) 2MegaPixel / IR LED supported for Night Mode Multi-profile Video Streaming / Digital PTZ, Video Crop / IP68

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IR IP MG PTZ CAMERA

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# Components



1. IR IP MG CAMERA 1SET

2. MANUAL 1EA

## Warnings & Cautions



• If you fail to read this information and handle the product incorrectly, death or serious injury may occur.

- The unit should be installed by the trained personnel.
- Switch off immediately if the product emits smoke or abnormal heat.
- Never install the product in area exposed to oil or gas.
- Never touch the power cord with wet hands.
- Clean only with dry cloth.
- Ensure that the product is not subjected to strong impacts and vibration.



### **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING
TO QUALIFIED SERVICE PERSONNEL.

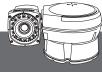


This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

## WEEE Compliance statement







## English Disposal of your old appliance

- 1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
  2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- 3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- 4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

### Français/French Élimination de votre ancien appareil

- 1. Ce symbole, représentant une poubelle sur roulettes barrée d'une croix, signifie que le produit est couvert par la directive européenne 2002/96/EC.
- 2. Tous les produits électriques et électroniques doivent être éliminés séparément de la chaîne de collecte municipale des ordures, par l'intermédiaire des installations de collecte prescrites et désignées par le gouvernement ou les autorités locales.
- 3. Une élimination conforme aux instructions aidera à réduire les conséquences négatives et risques éventuels pour l'environnement et la santé humaine.
- 4. Pour plus d'informations concernant l'élimination de votre ancien appareil, veuillez contacter votre mairie, le service des ordures ménagères ou encore le magasin où vous avez acheté ce produit.

### Deutsch/German Entsorgung von Altgeräten

- 1. Wenn dieses Symbol eines durchgestrichenen Abfalleimers auf einem Produkt angebracht ist, unterliegt dieses Produkt der europäischen Richtlinie 2002/96/EC.
- 2. Alle Elektro- und Elektronik-Altgeräte müssen getrennt vom Hausmüll über die dafür staatlich vorgesehenen Stellen entsorgt werden.
- Mit der ordnungsgemäßen Entsorgung des alten Geräts vermeiden Sie Umweltschäden und eine Gefährdung der persönlichen Gesundheit.
- 4. Weitere Informationen zur Entsorgung des alten Geräts erhalten Sie bei der Stadtverwaltung, beim Entsorgungsamt oder in dem Geschäft, wo Sie das Produkt erworben haben.

## WEEE Compliance statement



### Italiano/Italian RAEE: SMALTIMENTO DELLE VOSTRE VECCHIE APPARECCHIATURE

- 1. Quando il simbolo del "Cassonetto Barrato" è apposto su un prodotto, significa che lo stesso può ricadere nei termini previsti dalla Direttiva Europea nr. 2002/96/EC in funzione dell'attuazione definita dalla Legislazione dei singoli stati membri dell'Unione Europea.
- 2. Tutti i prodotti elettrici ed elettronici dovrebbero essere smaltiti separatamente dai rifiuti municipali, tramite appositi contenitori, approvati dall'Amministrazione Comunale o dalle Autorità Locali.
- 3. Il corretto smaltimento delle vostre vecchie apparecchiature, contribuirà a prevenire possibili conseguenze di impatto negativo sull'ambiente e per la salute dell'uomo.
- 4. Per maggiori informazioni circa lo smaltimento delle vostre vecchie apparecchiature, siete pregati di contattare l'ufficio municipale della vostra città, il servizio di smaltimento rifiuti o il punto vendita nel quale avete acquistato il prodotto.

### Polski/Polish Utylizacja starych urządzeń

- Kiedy do produktu dołączony jest niniejszy przekreślony symbol kołowego pojemnika na śmieci, oznacza to, że produkt jest objęty europejską dyrektywą 2002/96/EC.
- Wszystkie elektryczne i elektroniczne produkty powinny być utylizowane niezależnie od odpadów miejskich, z wykorzystaniem przeznaczonych do tego miejsc składowania wskazanych przez rząd lub miejscowe władze.
- 3. Właściwy sposób utylizacji starego urządzenia pomoże zapobiec potencjalnie negatywnemu wpływowi na zdrowie i środowisko.
- Aby uzyskać więcej informacji o sposobach utylizacji starych urządzeń, należy skontaktować się z władzami lokalnymi, przedsiębiorstwem

zajmującym się utylizacją odpadów lub sklepem, w którym produkt został kupiony.

### Português/Portuguese Eliminação do seu antigo aparelho

- 1. Quando este símbolo de latão cruzado estiver afixado a um produto, significa que o produto é abrangido pela Directiva Europeia 2002/96/EC.
- 2. Todos os produtos eléctricos e electrónicos devem ser eliminados separadamente da coleta de lixo municipal através de pontos de recolha designados, facilitados pelo governo ou autoridades locais.
- 3. A eliminação correcta do seu aparelho antigo ajuda a evitar potenciais consequências negativas para o ambiente e para a saúde humana.
- 4. Para obter informaçõs mais detalhadas acerca da eliminação do seu aparelho antigo, contacte as autoridades locais, um serviço de eliminação de resíduos ou a loja onde comprou o produto.

### Español/Spanish Cómo deshacerse de aparatos eléctricos y electrónicos viejos

- 1. Si en un producto aparece el símbolo de un contenedor de basura tachado, significa que éste se acoge a la Directiva 2002/96/EC.
- 2. Todos los aparatos eléctricos o electrónicos se deben desechar de forma distinta del servicio municipal de recogida de basura, a través de puntos de recogida designados por el gobierno o las autoridades locales.
- 3. La correcta recogida y tratamiento de los dispositivos inservibles contribuye a evitar riesgos potenciales para el medio ambiente y la salud pública.
- 4. Para obtener más información sobre cómo deshacerse de sus aparatos eléctricos y electrónicos viejos, póngase en contacto con su ayuntamiento, el servicio de recogida de basuras o el establecimiento donde adquirió el producto.

### **General Features**



- FULL HD IR PTZ has been designed unique and strong with high quality for security applications that demand the very high performance both day and at night time.
- Rated to an industry leading IP68, the vandal resistant aluminum camera housing is suitable for installation in the harshest of environments.
- Surveillance with optimum picture is possible owing to filter changeable Day & Night function and DSS function.
- Auto-IR cut filter removable function is the auto-controlling operation such as color picture plus infrared cut filter during the day and black and white picture plus filter elimination at night.

#### THE WORLD'S FIRST 360° ENDLESS PAN/TILT MOTION

• IR PTZ camera adopted the world's first 360° endless Pan / Tilt.

#### PAN / TILT TORQUE COMPENSATION

• Pan / Tilt Torque vibration sensor keeps the Pan / Tilt Motor securely in place during strong winds.

#### AUTO LED PULSE CONTROL BY DISTANCE RANGE

• It automatically controls the pulse of LED electric current which is consumed Most depending on distance range so that it produces 2 times better LED Brightness with same amount of electric current as others.

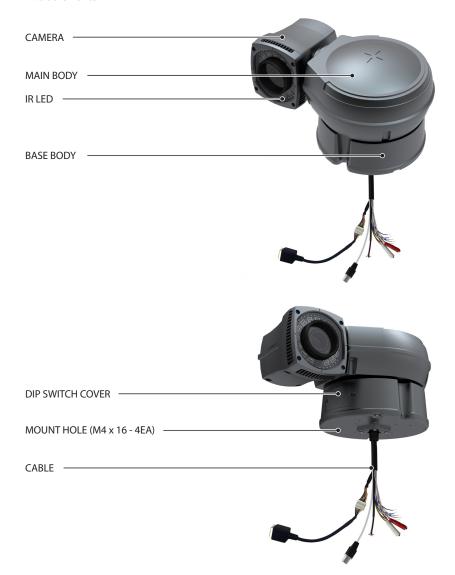
#### VARIOUS SURVEILLANCE FUNCTIONS

- Auto Scan repeats pan and tilt between two preset positions with different speed and dwell time.
- 8 Group Tour up to 8 Programmable Group tours available and each group is consisting up to 60 presets step with different speed and dwell time with 16 characters.
- 165 programmable preset positions are available with 16 characters.
- 8 Patterns up to 8 programmable user-defined patters are available with 16 characters and each one is consisting 50 seconds, total 480.
- 8 Sectors up to 8 programmable user-defined sectors are available with 16 characters.
- 4 Alarm input and 2 relay out up to 4 alarms and 2 relay out available to match with preset, tours, patterns.

### **Part Names**



#### A. Basic Parts



## Part Names



#### B. Connection Method

### a Explanation

Color	USE
YELLOW	LED RED
WHITE	LED GREEN
BLUE	LED +
BROWN	LED -
SKY BLUE	D
PINK	С
ORANGE	LAN RX-
GRAY	В
VIOLET	Α
RED	LAN RX+
GREEN	LAN TX-
BLACK	LAN TX+



### **(b)** Explanation

Color		USE
TRANSPARENT PINK	BNC	Video Cable

### © Explanation

	Color		USE
YELLO	W		AUX 1-A
BROWN RED WHITE GRAY VIRMILION VIOLET PINK PASTEL GREEN BLACK BLUE			AUX 1-B
			AUX 2-A
			AUX 2-B
			GND
			ALARM 1
		(AWG#20)	ALARM 2
			ALARM 3
			ALARM 4
			GND
			RS-485 D+
GREEN			RS-485 D-
PHONE JACK	RED		MIC LINE IN
PHONE JACK	WHITE		LINE OUT



### **@** Explanation

Color		USE
RED		+ DC 24
WHITE		GND
BLACK		N/C

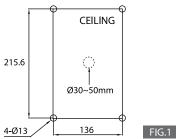
## Installation



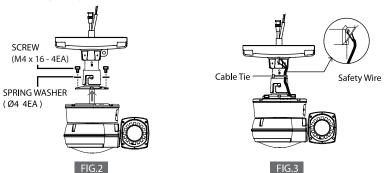
### A. Ceiling Mount Bracket

	CON	TENTS	
1. CEILING MOUNT BRACKET	1EA	4. SPRING WASHER Ø4	5EA
2. SET ANCHOR BOLT (W5/9)	4EA	5. WRENCH (3mm)	4EA
3. SCREW M4 x 16	5EA	6. MANUAL	

A-1. When you install IR PTZ Camera on the ceiling, make 4 holes at the edge with  $\emptyset$ 13 in diameter and 37mm in depth. If you want to connect the cables from the inside of the ceiling, also make a ole for the cables with about  $\emptyset$ 30~50 in diameter in the center of 4 edges. (FIG.1)

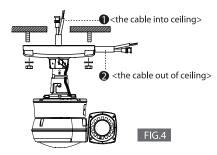


- A-2. Connect the Ceiling Mount Bracket to the Camera with 4 pieces of M4X16 screws and spring washer. (FIG.2)
- A-3. Connect the Safety wire of the Camera to the Bracket. In order to avoid getting entangled in the Camera, fasten the Safety wire to the bracket with Cable tie. (FIG.3)





A-4. When you want to connect the cables from the inside of ceiling, pass the cables through the ceiling. When you want to connect the cables from the outside of ceiling, remove the hole cap from the side of the bracket and pass the cables through the hole.



A-5. Install 4 pieces of Anchor bolt in the holes at the edge and tight enough with Nuts. (FIG.4)



A-6. Connect the cables referring to the page 8. (FIG.5)

### Installation

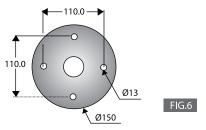


#### **B. Pole Stand**

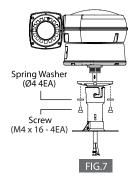
	CONT	TENTS	
1. POLE STAND	1EA	5. SCREW M4 x 16	5EA
2. BOLT & NUT M10	4EA	6. SPRING WAHGER Ø4	5EA
3. FLAT WASHER	4EA	7. WRENCH (3mm)	1EA
4. SPRING WASHER Ø10	4EA	8. MANUAL	
		,	1EA

B-1. When you install IR-PTZ Camera on the pole, make 4 holes at edge with Ø13 in diameter and 37mm in depth.

Make also a hole for the cables with about Ø30~50 in diameter in the bottom center of the bracket. (FIG.6)



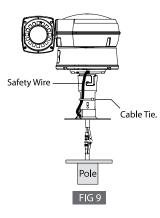
- B-2. Pass the cables of the camera through the inside of Pole Stand and connect the Camera to the Pole Stand with pieces of M4\*16 screws. (FIG.7)
- B-3. Connect the Safety Wire of the camera to the bracket. In order to avoid getting entangled in the camera, fasten the Safety wire to the bracket with Cable Tie. (FIG.8)



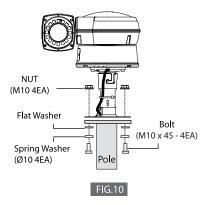




B-4. Install 4 pieces of Anchor bolt in the Ø13 holes at the edge and connect the cables.



B-5. Adjust the Camera and Pole Stand to M10 x 45 Bolt and Flat Washer, Spring Washer. And then tight enough with Nuts. (FIG.10)



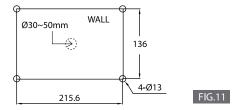
### Installation



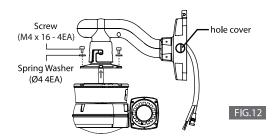
#### **C. Wall Mount Bracket**

	CONT	ENTS —	
1. WALL MOUNT BRACKET	1EA	4. SPRING WASHE	R Ø4 5EA
2. SET ANCHOR BOLT (W5/6)	4EA	5. WRENCH (3mm	) 1EA
3. SCREW M4 x 16	5EA	6. MANUAL	

C-1. When you install IR PTZ Camera on the wall, make 4 holes at the edge with Ø13 in diameter and 37mm in depth and install 4 pieces of Anchor bolt in the Ø13 holes at the edge. (FIG.11)

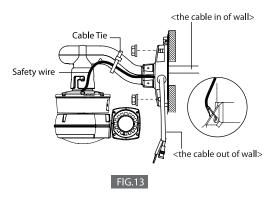


- If you want to connect the cables from the inside of the wall, also ake a hole for the cables with about  $\emptyset 30 \sim 50$  in diameter in the center of 4 edges.
- In order to avoid the impact of the Camera and Bracket when moving, set and drill in the long side as length and the short side as height.
- Check also if the long side of the Bracket sets as length and the short side of the Bracket sets as height.
- C-2. Connect the Camera to Wall Mount Bracket with 4 pieces of M4 x 16 screws and Spring Washer. (FIG.12)

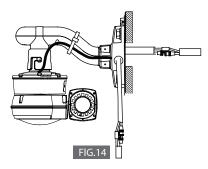




C-3. Connect the Safety wire of the Camera to the Bracket. In order to avoid getting entangled in the Camera, fasten the Safety wire to the bracket with Cable tie. (FIG.13)



- C-4. When you want to connect the cables from the inside of wall, pass the cables through the wall. When you want to connect the cables from the outside of wall, remove the hole cap from the side of the bracket and pass the cables through the hole.
- C-5. Install 4 pieces of Anchor bolt in the holes at the edge and tight enough with Nuts. (FIG. 13)



C-6. Connect the cables referring to the page 8. (FIG.14)

### Installation



### **D. Required System Specification**

Required Specification of PC for Camera Configuration & Control.

Class	Recommendation	Remark
CPU	Pentium-4 3Ghz	
RAM	1GB	
Graphic Card	Higher than ATI Chip-Set based 64M	1600x1200(UXGA)
LAN Card	Higher than 100Mbps	
OS	Windows XP	
Web Browser	Higher than Internet Explorer 6.0	

 $\cdot$  Operating Systems supported : Windows 2000 Professional, Windows XP / Vista / 7.

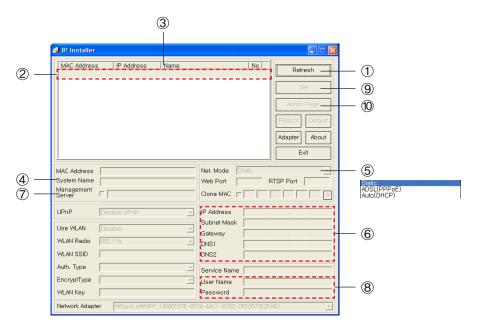
### E. Quick Installation Guide

- E-1. Connect PC and PTZ Camera to Network Device (HUB)
  - a. Prepare a PC which needs to be connected to Network.
  - b. Connect PC(or Lab-Top) with Product as FIG. 1.
  - AC Power is applied to the Product through AC Adaptor.





- E-2. IP PTZ Camera Network Configuration using IP Installer
  - Run the CD and Install IP Installer included in CD. Once install IP Installer, "WinPcap" will be installed. If not install "WinPCap", IP Installer won't operate.
  - a. Run IP Installer > Select Network Adaptor > Click OK.
  - b. If Configuration Window open, Click ① > Double Click the relevant product at ② > Fill in ④ > Configure ⑤ > Fill in ⑥ or ⑧.
  - c. If Configuration is completed, Click Set Button (9) to apply Configuration.
  - d. Access to Camera Admin Page by clicking 10.



• For the Network Configuration of IP PTZ Camera, IP Installer should be higher than 3.0.1 Version.

For the Window 7 User,"WinPCap" should be higher than 4.0 Version.

\_\_\_\_

### Installation



 $\cdot$  If you click each field of 3, you can use sort function. For the detail, refer to IP Installer Manual.

You can select the most appropriate LAN, ADSL, Static/Dynamic IP per Cable to user's circumstance via ⑤ menu. In case of selecting Dynamic(Automatic) IP, ⑥ menu will be deactivated, In case of ADSL, please insert User Name and Password provided from ISP in each field of ⑧.

· For DDNS Service

Insert mgmt.net-video.net in  $\widehat{\mathcal{T}}$  > Please configure to be registered on DDNS by marking Check Box.

You can use after Member Registration on Management Site "http://www.net-video.net/".

#### E-3. Remote Connection to IP Camera

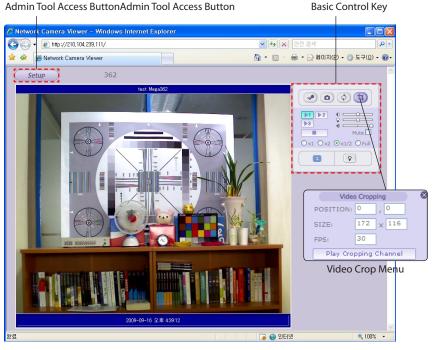
a. Connection via Web Viewer

Web View is the simplest method to connect to product via internet explorer. Once you insert "http://IP\_address:HTTP\_port number" into Internet Explorer, you can access to the relevant product.



· For the use of Web Viewer, Active-X module should be installed. If internet access is available, you can download it by accessing Camera or if you install NVR-Pro, Active-X module will be installed together.





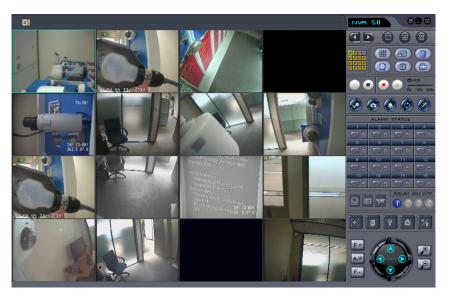
[Web Viewer Connection]

### Installation



#### b. Connection via NVR-Pro

NVR-Pro is a CMS program to connect several IP Cameras and/or Video Servers. Once you run NVR-Pro after installing on the remotely located PC, you can monitor real-time Video/Audio on the PC by accessing to IP Camera via IP Address assigned to each IP Camera. For the access to Product by using NVR-Pro, you have to configure all required information at NVR-Pro. For the detail, please refer to [NVR-Pro User Manual].



[ NVR-Pro ]

### E-4. Initial Configuration by connecting Admin Mode

All Parameters of IP PTZ Camera is initially set as factory default. So you must change them with appropriate value to your network configuration by accessing via Admin Tool. Admin Tool Access Method is as below.

Http://[IP Address]:[HTTP Port No.]/ admin.htm

## **Quick Operating Keys**



The IR Camera supports Pelco D/P Protocols

The default setting of the IR Camera is Pelco D/P(Auto Detection) with 2400bps (Baud rate).

#### [PELCO D/P PROTOCOLS]

The comprehensive feature set of the camera is available from Pelco Compatible controllers via quick operation keys as defined below.

 $1 \sim 64 + \text{preset}$  and  $100 \sim 200 + \text{preset}$  are used for normal user presets.

Presets  $65 \sim 99 + \text{are reserved for special functions.}$ 

For Example, to enter OSD MENU, press the button 95 + Preset.

#### <Quick Operation Key Table 1>

Number	Note	Function
1 ~ 64, 100 ~ 200 + PRESET	Preset	Executing Preset 1 ~ 64, 100 ~ 200
65 + PRESET	Preset Status	Display Preset Status
66 + PRESET	Auto Scan	Executing Auto Scan
70 + PREST	VIB CORR	Selectable On / Off in picture Stabilization Function
71 ~ 78 + PREST	Group Tour	Executing Group Tour #1 ~ #8
81 ~ 88 + PREST	Pattern	Executing Pattern #1 ~ #8
91 + PREST	Zero Position	Searching Pan / Tilt Zero Position
92 + PREST Freeze Select Freeze image when camera is working		Select Freeze image when camera is working
93 + PREST	BLC	Selectable On / Off BLC function
94 + PREST	Day/Night	Selectable Day / Night / Auto Mode
95 + PREST	OSD	Entering OSD Main Menu
96 + PREST	Focus Adjust	Focus adjust
97 + PREST	Alarm	Selectable Enable / Disable all alarms
98 + PREST	AUX1	Selectable On / Off Aux1
99 + PREST	AUX2	Selectable On / Off Aux2

#### <Quick Operation Key Table 2>

Number	Function	
Tilt Up / Down	Sub menu cursor moves up / down	
Pan Left / Right	Enter to the sub menu or status change or decrement	
Focus Near	Using for enter key when user select YES or NO	
Focus Far	Using for function changing keys when set coordinate	
Zoom Tele	Status cursor to the right	
Zoom Wide	Status cursor to the left	

020

# Quick Operating Keys



• 65 + Preset

Preset Status is displayed, to remove this screen, Press Focus Near button.

• 92 + Preset

This feature freezes the current live image during tour, auto scan or pattern operation.

When you press 92+Preset button, the image freezes but the camera is still working as operation such as tour, pattern or auto scan.

To return to normal images, press 92+Preset button again

- This feature is operated by preset number but not included in OSD main menu.
- Due to Zoom camera module. OSD Menu not provides every feature. In this case, "Not available" is displayed on the monitor.

### Diagnostic



Whenever the IR Camera is power on, a standard diagnostic is operated.

CAMERA ID: 001
BAUD RATE: 2400BPS
WAITING.......

PAN ORIGIN TEST OK
TILT ORIGIN TEST OK
TX CONNECTION TEST OK
CAMERA COMM TEST OK

A. PAN Origin Test

Zero point of Pan is Located during the Panning test.

B. Tilt Origin Test

Zero point of Tilt is Located during the Tilt Test

C. TX Connection Test

Wait for 60 seconds for TX Connection Test.

During 60 seconds, the camera is must received a signal by any control equipment as DVR or controller.

Then OK is displayed then automatically verifying TX Connection Test

- If "Not Tested" is displayed in the test.
- The result which is not received any signal from DVR or controller.
- Wrong connecting way such as the protocol, baud rate or RS-485 connection.

The use may check the install way carefully.

D. Camera Comm. Test

Camera communication is also checked.

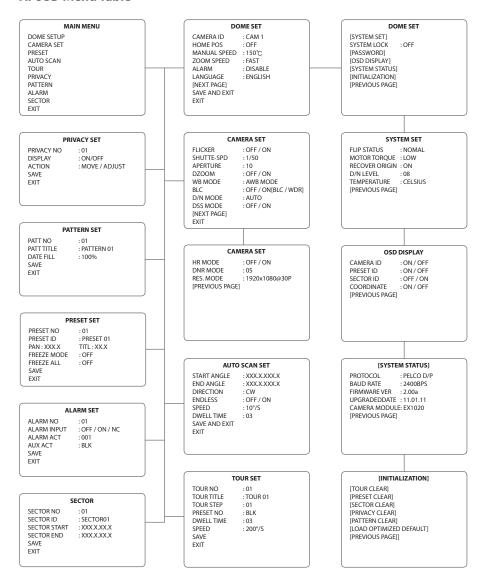
OK should be displayed in these four tests before installation.

If all the above Tests are OK, "NOW EEPROM CHECKING" and "ALL DATA INITIALIZING" is displayed and the camera is ready to operate.

# **OSD Menu Setting**



#### A. OSD Menu Table





To enter OSD Menu, press the button 95+Preset then OSD Main Menu is displayed.

MAIN MENU
DOME SETUP
CAMERA SET
PRESET
AUTO SCAN
TOUR
PRIVACY
PATTERN
ALARM
SECTOR
EXIT

• Use the joystick up down to move the position and left right to make selection.

#### **B. Dome Setup**

To enter dome setup, use the joystick right to move when cursor on dome setup.

DOME SET

CAMERA ID : CAM 1 000000000

HOME POS : OFF
MANUAL SPEED : 150°C

ZOOM SPEED : FAST
ALARM : DISABLE
LANGUAGE : ENGLISH
INEXT PAGE]
SAVE AND EXIT
EXIT

#### B-1. DOME SET - CAMERA ID

To set camera name, and select a title of up to 16 characters using left or right direction keys or joystick. Press ZOOM TELE button to move to the next character from left to right direction and ZOOM WIDE button to move to the next character from right to left direction. (Space displays when  $\square$  appears.)

#### B-2. DOME SET - HOME POS

This is for Home Position, basically, including the Recover. On ON, it would be indicated the number [Relevant function], number is for time and [Relevant function] is that what operation product will be working on. You can set up the time using the Joystick Left/Right, it should be showed up on the Left of Menu if you press the Focus Far Key. In case of "[]", possible to change into other one as you want and come out from "[]" after vanish.

### **OSD Menu Setting**



- Set time: 15~90 (Each 5)

- Set article: [AUTO] - RECOVER operation.

[PRST1]-[PRST8] – PRESET1 ~ PRESET8 OPERATION. [TOUR1] ~ [TOUR8] – TOUR1 ~ TOUR8 OPERATION. [PATT1] ~ [PATT8] – PATTERN1 ~ PATTERN8 OPERATION

[SCAN] – AUTOSCAN OPERATION.

#### B-3. DOME SET - MANUAL SPEED

Manual speed of Pan / Tilt is selectable from 100°/sec up to 200°/sec. The default setting is 150°/sec.

#### B-4. DOME SET - ZOOM SPEED

Move joystic right or left direction is selectable from SLOW ~ FAST. The default setting is FAST.

#### B-5. DOME SET - ALARM

You must enable the alarms for them to operate. The default setting is disabled.

This function can be recalled by pushing 97+preset button.

#### B-6. DOME SET – LANGUAGE

Multiple languages are selectable here including English, Italian and Polish. The default setting is ENGLISH.

#### B-7. DOME SET - [NEXT PAGE]

DOME SET
[SYSTEM SET]
SYSTEM LOCK : OFF
[PASSWORD]
[OSD DISPLAY]
[SYSTEM STATUS]
[INITIALIZATION]
[PREVIOUS PAGE]



#### B-7-1. DOME SET - [NEXT PAGE] -SYSTEM SET

To enter system set, use the joystick right to move when cursor on system set.

- Flip status available and the default setting is NORMAL.
- Move joystick right or left direction is for selecting NORMAL or REVERSE.
- Motor torque available and the default setting is LOW.
   Move joystick right or left direction is for selecting LOW or MIDDLE or HIGH.
- Recover Origin is for correct when both of PAN and TILT are warped by impact.
- On ON, it should be operated, on OFF, it's not.
- D/N Level is selectable 0 to 15. The default setting is 08.
- Temperature available and the default setting is CELSIUS.

  Move joystick right or left direction is for selecting CELSIUS or FAHRENHEIT.

SYSTEM SET
FLIP STATUS : NOMAL
MOTOR TORQUE : LOW
RECOVER ORIGIN : ON
D/N LEVEL : 08
TEMPERATURE : CELSIUS
[PREVIOUS PAGE]

#### B-7-2. DOME SET - [NEXT PAGE] -SYSTEM LOCK

All stored dome settings can be password protected to prevent unauthorized changes. In order to enter [PASSWORD] page, the system lock status must firstly be set as ON. The default setting is OFF.

### B-7-3. DOME SET - [NEXT PAGE] -[PASSWORD].

To enter this page to set a password. move joystick or pan key in the right direction.

The password must be set by preset number from 001 to 255 (Default 99).

ENTER PASSWORD BY ENTERING PRESET CODE PASSWORD \*\*\* CONFIRM \*\*\*

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### OSD Menu Setting



Enter any number from 001~255 on the password blank area and again on the confirm blank area.

Then "CONFIRMED" is displayed on the monitor and the menu will go back to the previous age automatically.





[CANCELLED]

If you press an incorrect number between PASSWORD and CONFIRMED, "CANCELLED" is displayed on the monitor when you press FOCUS NEAR key. "CANCELLED" will be displayed on the monitor, it goes to previous page.

- When a password has been set, the operator must enter the correct password in order to enter OSD MAIN MENU, or to change any of the domes configuration data.
- If you set a password you must ensure that it does not get lost. If this happens the dome must be returned for workshop repair.

### B-7-4. DOME SET - [NEXT PAGE] - [OSD DISPLAY]

The camera ID setting defines whether the camera OSD display is displayed or switched off.

OSD DISPLAY			
CAMERA ID	: OFF		
PRESET ID	: OFF		
SECTOR ID	: OFF		
COORDINATE	: ON		
[PREVIOUS PAGE	[]		

#### B-7-5. DOME SET - [NEXT PAGE] - [SYSTEM STATUS]

This page shows the information of this camera.

- Protocol and baud rate are shown due to the dip switch setting
- Firmware version and upgraded date will change if upgraded.
- Camera module is setting as follows.



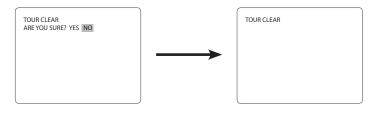
[SYSTEM STATUS]
PROTOCOL : PELCO D/P
BAUD RATE : 2400BPS
FIRNWAREVER : 2.00
UPGRADEDDATE : 11.01.11
CAMERA MODULE : EX1020
[PREVIOUS PAGE]

#### B-7-6. DOME SET - [NEXT PAGE] - [INITIALIZATION]

To clear the current settings select the item that you wish to reset back to factory defaults.

[INITIALIZATION]
[TOUR CLEAR]
[PRESET CLEAR]
[SECTOR CLEAR]
[PRIVACY CLEAR]
[PATTERN CLEAR]
[LOAD OPTIMIZED DEFAULT
[PREVIOUS PAGE]]

To clear the memorized data. move the joystick or pan right key until the cursor is on the required item.



Press FOCUS NEAR button when the cursor is at YES in order to clear memorized data.

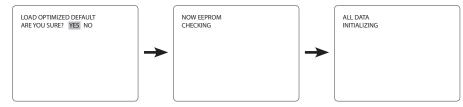
Then each item such as tour, preset, and sector will flicker for about 2  $\sim$  3 seconds.

After this process, the menu is returned to the previous page.

• Use the above method for [PRESET CLEAR], [SECTOR CLEAR], [PRIVACY CLEAR], [PATTERN CLEAR].

## **OSD Menu Setting**





- To Clear all data and return to factory defaults, move the joystick right or press the pan light key to when the cursor is at [LOAD OPTIMIZED DEFAULT] to enter the next page.
- Move joystick or the pan right key so that the cursor is over YES, then press the FOCUS NEAR button.
- "ALL DATA INITIALIZING" is then displayed for about 5~7 seconds and then the menu is returned to the previous page automatically.

#### B-8. DOME SET - SAVE AND EXIT

To saving the memorized data and escape this page, move joystick to the right direction when cursor is at SAVE AND EXIT.

#### B-9. DOME SET - FXIT

In order not to save any data and wants to escape this page, move joystick to the right direction when cursor is at EXIT.



#### C. Camera Set

C	AMERA SET
FLICKER	: OFF
SHUTT-SPD	: 1/50
APERTURE	: 10
DZOOM	: OFF / ON
WB MODE	: AWB MODE
BLC	: OFF / ON[BLC / WDR]
D/N MODE	: AUTO
DSS MODE	: OFF / ON
[NEXT PAGE]	
EXIT	

CAMERA SET

HR MODE : OFF / ON

DNR MODE : 05

RES. MODE : 1920x1080@30P

[PREVIOUS PAGE]

#### C-1. CAMERA SET - FLICKERLESS

The flickerless feature has options of 50Hz and 60Hz.

The default setting is OFF (NTSC: 60Hz / PAL: 50Hz).

The flickerless mode only needs to be set when there is a mismatch between the power frequency and camera sync rate. The default setting is OFF.

#### C-2. CAMERA SET - SHUTTER-SPD

It is for set up the Shutter Speed of camera.

- •Default value is Auto and it can be changed into other one using the Joystick Left/Right of Controller.
- Change to turn : Full Auto  $\rightarrow$  Manual
- Auto : Changed according to light level automatically.
- Manual : It can be changed into other one using the Focus Far Key of controller and on ON the DSS (Digital Slow Shutter), it should be set up 1/1 to 1/10,000, on OFF,  $1/50(1/60)\sim1/10,000$ .

#### C-3. CAMERA SET - APERTURE

Aperture correction enhances the picture details and sharpness by increasing the gain of the camera.

Increase the value to sharpen the image, decrease to soften it the default setting is 10. (The aperture level is from  $01 \sim 15$ .)

#### C-4. CAMERA SET - D ZOOM

Digital zoom is enabled to apply when the zoom lens has reached its maximum optical zoom in capability. The default setting is OFF.

### C-5. CAMERA SET - WB MODE

White balance functions has 4 modes and may need to be changed depending on the situation.

AWB Mode: 3,200°K to 6,500°K (Default)

Indoor: up to 3,200°KOutdoor: up to 5,800°K

## OSD Menu Setting



#### C-6. CAMERA SET - BLC (Back Light Compensation)

From simple ON / OFF setting to user friendly BLC status indication [BLC] status with control of controller by "FOCUS FAR KEY"("•" signal appeared) With the control of joystick on controller by LEFT / RIGHT, setting change of [BLC] / [WDR] is available.

Setting change completed by pressing FOCUS FAR KEY.("■" signal disappeared.) This function can be recalled by pushing 93 + Preset button.

#### C-7. CAMERA SET - D/N MODE

The dome camera can operate in day / night mode and will switch depending on lighting conditions. Alternatively it can be forced into color only mode.

The default setting is AUTO MODE. This function can be recalled by pushing 94 + Preset button.

#### C-8. CAMERA SET - DSS MODE (DIGITAL SLOW SHUTTER)

If digital slow shutter is enabled the exposure time of the camera is increased, thus allowing more light to be collected and improving low light response.

This setting should not be enabled if the dome is touring at night or fast moving objects are likely to be in the scene as smearing is also increased. The default setting is OFF.

#### C-9. CAMERA SET - [NEXT PAGE] - HR MODE

Images with a high resolution can be obtained using a newly developed DSP for improved pictur quality. The default setting is OFF.

#### OFF: 530TV Lines ON: 550TV Lines

#### C-9-1. CAMERA SET - [NEXT PAGE] - DNR MOED

It enables noise reduction digitally.

It sets the noise reduction rate using LEFT / RIGHT key of CONTROLLER JOYSTICK [OFF, 1~5]. The default setting is OFF

#### C-9-2. CAMERA SET - [NEXT PAGE] - RES. MODE

The current resolution will be displayed on the screen.



#### D. Preset Set

#### D-1. PRESET - PRESET NO

Up to 165 preset positions are available.

Use the joystick or pan left / right keys to select the number.

#### D-2. PRESET - PRESET ID

To create preset titles use the joystick or pan left / light keys to navigate the menu.

The ZOOM TELE button moves to the next character from left to right and ZOOM WIDE button moves to the next character from right to left. (Space displays when □ appears.)

#### D-3. PRESET - PAN: XXX.X TILT: XX.X

Preset FOCUS FAR button in order to set preset position then, use the joystick or pan left / right keys to the position where memorized preset number is needed.

Then press FOCUS FAR button again after setting a preset location.

D-4. FREEZE MODE: On Preset, you make a decision whether you get it move or stop.

On ON, Freeze Preset can be working on.

D-5. FREEZE ALL: You can set it up into ON / OFF, on ON, Freeze all should be working on.

#### D-6. PRESET - SAVE

Move the joystick right or press the pan right key when the cursor is at SAVE and then the cursor will be located on Preset ID for the continuous preset No. setting.

#### D-7. PRESET - EXIT

To escape this page, move joystick to the right direction.

### **OSD Menu Setting**



#### E. Auto Scan Set

66 + Preset button is working as AUTO SCAN after setting.

AUTO	O SCAN SET
START ANGLE END ANGLE DIRECTION ENDLESS SPEED DWELL TIME	: XXX.XXXXX : XXX.X.XXXXX : CW : OFF : 10°/5 : 03
SAVE AND EXIT EXIT	

#### E-1. AUTO SCAN - START ANGLE

To set the start position, press FOCUS FAR button then move the dome to the required start position. Press FOCUS FAR button again is to escape.

#### E-2. AUTO SCAN - END ANGLE

To set the end position, press FOCUS FAR button then move the dome to the required end position. Press FOCUS FAR button again is to escape.

#### E-3. AUTO SCAN - DIRECTION

Auto Scan directions are available as CW or CCW.

- CW : Clock wise direction. [Default]
- CCW: Count Clock Wise Direction.

#### E-4. AUTO SCAN - ENDLESS

Auto Scan can be set to endless rotation by enabling the endless option. The default setting is OFF.

#### E-5. AUTO SCAN - SPEED

The scan speed can be programmed from  $05^{\circ}$ /S up to  $35^{\circ}$ /S. The default setting is  $10^{\circ}$ /S.

#### E-6. AUTO SCAN - DWELL TIME

The dwell time at the start and end points can be programmed from 1 second to 30 seconds. The default setting is 03 seconds.

#### E-7. AUTO SCAN - SAVE AND EXIT

To save the memorized data and escape this page, move the joystick right or press the pan right key when the cursor is at SAVE AND EXIT.

#### E-8. AUTO SCAN - EXIT

To escape this page, move joystick to the right direction.



#### F. Tour Set

8 Programmable tours can be set and each tour can have up to 64 preset steps. After setting up the tours the  $71 \sim 78+$  Preset buttons launch group tours  $\#1 \sim 8$ .

	TOUR SET
TOUR NO TOUR TITLE TOUR STEP PRESET NO DWELL TIME SPEED SAVE EXIT	: 001 : TOUR 01 00 00 00 00 00 00 00 00 00 00 00 00

#### F-1. TOUR SET - TOUR NO.

Up to 8 group tours can be programmed.

#### F-2. TOUR SET - TOUR TITLE

To set a tour title, use the joystick left / right or pan left / right keys.

Each title can have up to 16 characters. Press ZOOM TELE button to move the next character from left to the right and ZOOM WIDE button to move the next character from right to left. (Space displays when  $\Box$  appears.) The tour title is not displayed on the monitor and is only for the reference of user.

#### F-3. TOUR SFT - TOUR STEP

Each tour group consists of up to 60 preset steps with different dwell time and speed.

It is possible to match any preset # for any tour step.

#### F-4. TOUR SET- PRESET NO.

For each tour step it is possible to select any preset number up to 64. The default setting is BLK.

#### F-5. TOUR SET - DWELL TIME

Dwell time can be programmed from 1-99 seconds.

The default setting is 03 seconds.

#### F-6. TOUR SET – SPEED

Each tour step can be set with a different speed up to 200°/S.

#### F-7. TOUR SET - SAVE

To save the memorized data and escape this page, move the joystick right or press the pan right key when cursor is at SAVE.

#### F-8. TOUR SET - EXIT

To escape this page, move joystick to the right direction.

### **OSD Menu Setting**



#### **G. Privacy Set**

8 Privacy masking zones can be set.

PR	IVACY SET	
PRIVACY NO DISPLAY ACTION SAVE EXIT	: 01 : OFF : MOVE	

G-1. PRIVACY SET - PRIVACY NO.

Up to 8 privacy masking zones can be set.

G-2. PRIVACY SET - DISPLAY

Move the joystick right or left or press pan right / left to set ON in order to show the selectable block in the center of the monitor. This block appears as a translucent square with blue color when set ON. The default setting is OFF.

G-3. PRIVACY SET - ACTION (MOVE / ADJUST)

To set the blocking area, press FOCUS FAR button when MOVE MODE is displayed.

Then use the joystick or pan keys to the user defined area in order to set the blocking area.

Then press FOCUS FAR button again to escape from Move mode.

To adjust the size of the blocking area, move the joystick or use the pan keys when the cursor is on ACTION. After it has changed to ADJUST MODE, press FOCUS FAR button in order to adjust the size of the blocking area. The size of the blocking area can be adjusted by using joystick up / down or left / right or the pan and tilt keys.

After adjusting the size of the blocking area, press FOCUS FAR button to escape the ADJUST mode.

- ADJUST : You can change the masking size by using the joystick or pan keys.
- MOVE: You can move the masking area by using the joystick or pan keys.
   (Default)



#### G-4. PRIVACY SET - SAVE

After setting the privacy masking zone, to save the data, move the joystick right or pan right key when the cursor is on SAVE.

After saving the data, the cursor moves to PRIVACY NO.2 automatically to prepare for the next privacy masking zone.

#### G-5. PRIVACY SET - EXIT

To escape this page, move the joystick right.

#### H. Pattern Set

8 Programmable patterns are available with 16 characters of title.

After set the data to the each pattern #1  $\sim$  8, 81  $\sim$  88+preset buttons are working as pattern #1  $\sim$  8.

	PATTERN SET
PATT NO PATT TITLE DATE FILL SAVE EXIT	: 01 : PATTERN 01

#### H-1. PATTERN SET - PATT NO.

Up to 8 Programmable user-defined patterns are available.

#### H-2. PATTERN SET - PATT TITLE

To set PATTERN TITLE move Joystick left / right or use the pan keys.

Press ZOOM TELE button moves to the next character from the left / right and ZOOM WIDE button moves to the next character from the right / left. (Space displays when  $\Box$  appears.)

The pattern title is not displayed on the monitor, but only for the reference of the user.

#### H-3. PATTERN SET - DATA FILL

To memorize a pattern, press FOCUS FAR button in order to start the process. The progress is shown as % filled. Press FOCUS FAR button again in order to escape.

# OSD Menu Setting



#### H-4. PATTERN SET - SAVE

To save the memorized pattern data, move the joystick right or press the pan right key when the cursor is on SAVE. Then the cursor moves to the PATT NO.02 in order to prepare for the next pattern.

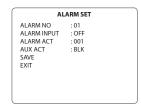
#### H-5. PATTERN SET - EXIT

To escape this page, move the joystick right or press the pan right key.



#### I. Alarm Set

4 Alarm inputs are available and each alarm is activating to presets, group tours or patterns.



#### I-1. ALARM SET - ALARM NO.

Up to 4 alarms are selectable by using joystick right or pressing the pan right key when the cursor is on ALARM NO.

#### I-2. ALARM SET - ALARM INPUT

Alarm inputs can be programmed as NC (Normally Close) or NO (Normally Open).

The default setting is OFF.

#### I-3. ALARM SET - ALARM ACT

Active alarms can trigger modes such as presets, Group tours 1-8, and Patterns 1-8.

Use the joystick or pan keys to select any preset number, Group tour No.

#### I-4. ALARM SET - AUX ACT

You can select one of BLK (No AUX triggering) / AUX1 (triggering AUX1) / AUX2 (triggering AUX2) and default value is BLK.

If ALARM triggers AUX, AUX will be off after 5 seconds. If many ALARMs trigger AUX port one by one, the last one will be off after 5 seconds.

#### I-5. ALARM SET - SAVE

After setting up the alarm features, to save the data move the joystick right or press the pan right key when the cursor is on SAVE. After saving the data, the cursor moves to Alarm NO.2 automatically to prepare for the next alarm.

#### I-6. ALARM SET - EXIT

To escape this page, move the joystick right or press the pan right key.

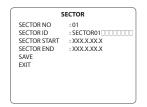
 Before activating Alarms, you must set ALARM ENABLE at DOME SET ALARM ENABLE.

## **OSD Menu Setting**



#### J. Sector Set

Up to 8 programmable sectors are available with 16 characters. This feature is useful to memory the certain location such as parking zone or so on.



#### J-1. SECTOR SET - SECTOR NO.

Up to 8 programmable sectors are available.

#### J-2. SECTOR SET - SECTOR ID

To set a SECTOR ID, use the joystick or pan left /right keys.

Press ZOOM TELE button to move to the next character from left to right and ZOOM WIDE button to move to the next character from right to left. (Space displays when  $\Box$  appears.)

#### J-3. SECTOR SET - SECTOR START

To set a SECTOR START position press FOCUS FAR button then move the joystick or pan keys to set the position. Press FOCUS FAR button again to escape.

#### J-4. SECTOR SET - SECTOR END

To set a SECTOR END position press FOCUS FAR button then move the joystick or pan keys to set the position. To press FOCUS FAR button again to escape.

#### J-5. SECTOR SET - SAVE

After setting the SECTOR position, to save the data move the joystick right or press the pan right key when the cursor is on SAVE. After saving the data, the cursor moves to sector No. 2 automatically to prepare for the next sector.

#### J-6. SECTOR SET - EXIT

To escape this page, move joystick to the right or press the pan right key.

#### K. Exit

To escape OSD Main Menu, move joystick to the right or left direction then this camera is ready to operate.

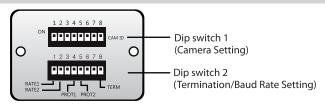
## **DIP Switch Setting**



### A. ID Setting

The camera has camera ID to be controlled by controller or DVR. After opening, set ID using DIP SW1.

• Factory default : Camera ID = 1



ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
Digit Value	1	2	4	8	16	32	64	128
1	ON	OFF						
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF

				:				
				:				
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

# **DIP Switch Setting**



#### **B. Protocal**

The 4<sup>th</sup>, 5<sup>th</sup> of DIP SW2 above are used for protocol setting.

• Factory default: Pelco-D or Pelco-P (Auto detection)

DIP SW2 - 4 <sup>th</sup>	DIP SW2 - 5 <sup>th</sup>	BAUD RATE
OFF	ON	Pelco-D or Pelco-P
OFF	OFF	Not used
ON	ON	Not used
ON	OFF	Not used

### **C. Baud Rate Setting**

The 1st, 2nd SW of DIP SW2 above a used for BAUD RATE setting. DIP SW can be changeable to 4,800bps, 9,600bps.

• Factory default : 2,400bps	
------------------------------	--

DIP SW2 - 1 <sup>st</sup>	DIP SW2 - 2 <sup>nd</sup>	BAUD RATE
OFF	OFF	2,400bps
ON	OFF	4,800bps
OFF	ON	9,600bps
ON	ON	Not used

<sup>•</sup> The 3<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> of DIP SW2 are not used.

#### D. 485 Termenation

The  $8^{th}$  of DIP SW2 is used for  $100\Omega$  termination. Set ON DIP SW2-1st of only the last looped camera from the controller.



## **Trouble Shooting**



If you have trouble operating in your camera, refer to the fallowing.

Problem	Solution
NO OPERATION	<ul> <li>Check if the power supply is AC 24V.</li> <li>Check if RS-485 communication cable is connected correctly.</li> <li>Check camera ID setting.</li> <li>Check the termination.</li> </ul>
NO PICTURE	<ul> <li>Check if all the cables are connected correctly.</li> <li>Check the monitor is adjusted correctly.</li> <li>Check if video signal line is cut.</li> </ul>
DARK SCREEN	Adjust the monitor status.
ABNOMAL CAMERA OPERATION STATUS	Check if the voltage level is out of the specification.     Check the termination.
SCREEN NOT CLEAR	<ul> <li>Check if there is dust on a lens.</li> <li>Adjust the monitor status.</li> <li>If excessive light is seen on a screen, change the camera angle or location.</li> <li>Adjust the lens focus again.</li> </ul>

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## **Trouble Shooting**



#### A. No Video on Viewer

- →Network Connection Status Check(Ping Test)
  You can check the Network Connection Status by doing Ping Test.
- Start > Run > cmd > Ping IP Address (EX>ping 172.16.42.51).
- If you get the response such as "Reply from~", Network Configuration & Connection Status is good. Please re-try to access or refer to other trouble shooting category. (FIG. 2)
- If you get the response such as "Request timed out", Network Configuration & Connection Status is in problem. Please check the Network Cable and Configuration. (FIG. 3)

```
_ 🗆 x
                                                                           ∝ C:₩WINDOWS₩system32₩cmd.exe
                                                                                                                                        _ | x |
 C:₩WINDOWS₩system32₩cmd.exe
                                                                           Microsoft Windows XP [Version 5.1.2600]
 crosoft Windows XP [Version 5.1.2600]
                                                                             Copyright 1985-2001 Microsoft Corp.
C) Copyright 1985-2001 Microsoft Corp.
*#Documents and Settings\superman>ping 172.16.42.51
                                                                             :\Documents and Settings\superman>ping 172.16.42.51
inging 172.16.42.51 with 32 bytes of data:
                                                                           Pinging 172.16.42.51 with 32 bytes of data:
deply from 172.16.42.51: bytes=32 time<1ms TTL=64 deply from 172.16.42.51: bytes=32 time<1ms TTL=64 deply from 172.16.42.51: bytes=32 time<1ms TTL=64
                                                                           Request timed out.
                                                                           Request timed out.
 ply from 172.16.42.51: bytes=32 time<1ms TTL=64
 ng statistics for 172.16.42.51:
                                                                             ng statistics for 172.16.42.51:
  Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
  oroximate round trip times in milli-seconds:
Minimum = Oms, Maximum = Oms, Average = Oms
                                                                             :\Documents and Settings\superman>_
 ₩Documents and Settings\superman>_
```

FIG. 2

FIG. 3

## **Trouble Shooting**

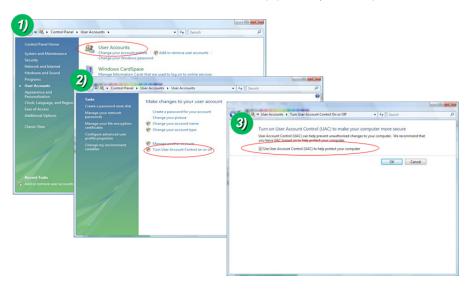


### B. Windows vista and Windows 7 User for Record & Capture Problem

For the use of Video Recording & Capture function on NVR-Pro and Web Viewer, Windows Vista and Windows 7 Users are required to configure "User Account Configuration" and "Program Execution Entitlement Configuration". If not configure, Recorded File won't be generated or Captured Image on Web Viewer won't be saved.

### [Windows Vista Configuration]

- 1. User Account Configuration
- 1) Select "User Account" on Control Panel
- 2) Select "Turn User Account Control on or off"
- 3) Uncheck "Use User Account Control to help protect your computer".



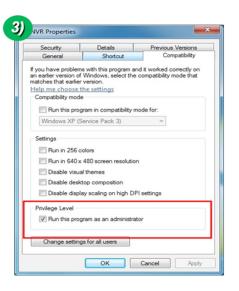
044 045

## **Trouble Shooting**



- 2. Program Execution Entitlement Configuration
- 1) Select "NVR" icon on the wallpaper.
- 2) Select "Properties" menu popped up by clicking right button on Mouse.
- 3) Select Check Box of "Run this program as an administrator" from the compatibility Tap.



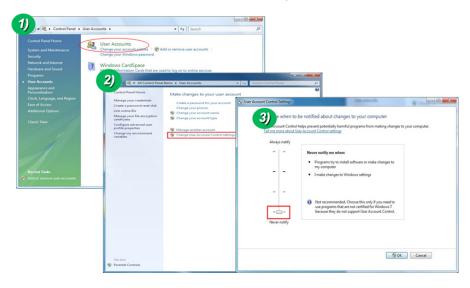


## **Trouble Shooting**



### [Windows 7 Configuration]

- 1. User Account Configuration
- 1) Select "User Account" on Control Panel
- 2) Select "Change User Account Control Setting"
- 3) Set the Alarm Level at the lowest "Never Notify"



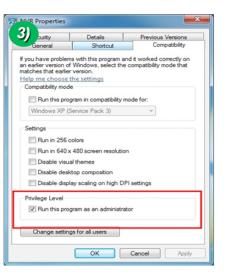
046

# **Trouble Shooting**



- 2. Program Execution Entitlement Configuration
  - 1) Select "NVR" icon on the wallpaper
- 2) Select "Properties" menu popped up by clicking right button on Mouse
- 3) Select Check Box of "Run this program as an administrator" from the compatibility Tap.





# Specification



Model	IR IP MEGAPIXEL PTZ CAMERA
VIDEO PART	
Compression Method	Simultaneous Dual Codec (H.264 / MJPEG)
Resolution	1920 x 1080@30fps
Multi-Profile Streaming	- 3 simultaneous video profiles - Select the codec type, resolution and frame rates for each profile.
Intelligent Bit-Rate Control	CBR, VBR, HBR
PTZ	Digital PTZ & video crop
Image Setting	Text overlay, Privacy mask, De-interlace filter
Motion detection	3 regions
Motion tracking	Intelligent motion tracking
AUDIO PART	
Mono Upstream	32Kbps G.726 ADPCM ~ LINE-in / MIC-in
Mono Downstream	64Kbps u-law PCM ~ Line-out(1Vpk)
Stereo	Stereo support
NETWORK	
Network Protocol	- IPv4/v6, TCP, UDP, IGMP, ICMP, ICMPv6, ARP, RARP, PPPoE, RTCP - RTP, RTSP, SDP, HTTP, HTTPS, SMTP, FTP, DHCP, UPnP, SNMP - NTP, DNS, DynDNS, SOCKS
Dynamic IP	Supported
Security	- User ID & Password protection, IP address filtering - HTTPS encryption, Digest Authentication, User Access Log
EXTERNAL TERMINALS	
LAN	10/100BaseT LAN (auto MDIX)
Analog Output	1 channel D1 CVBS output of the encoding video
RS-485	RS-485 for external PTZ device
Alarm Input / Output	Alarm I/O (4 Sensor input & 2 Relay output)
Factory Reset	Supported
Other	Two Stereo Jack / RS-232 Debug / 12V DC in
CLIENT SOFTWARE	
NVR-Pro	Bundle Software
SYSTEM INTEGRATION	
Intelligent Video	Motion Detection + IVS Module(Option)
Alarm Triggers	Intelligent Video + Sensor Input
Alarm Events	Video File Upload(FTP), Still Image(E-mail), PTZ Presets, Relay Output
Video Buffer	5 ~ 15 sec Pre-alarm & 10 sec Post-alarm (E-mail, FTP), 10 ~ 60 sec (SD Memory) Post - alarm
PTZ Control	64 presets, tour, PTZ control queue
OPERATION ITEMS	
Interface	Ethernet Injector & Surge Suppressor, 5 port High Power PoE Switch
Local Storage	SD Card
Keyboard Controller	TB-CN3R1
D!	TD 100 TD 100 TD 204D TD 200D TD 200 TD 201 TD 211D

Braciet TB-105, TB-106, TB-304R, TB-305R, TB-307, TB-308, TB-311R

# Specification



IR IP MG PTZ CAMERA

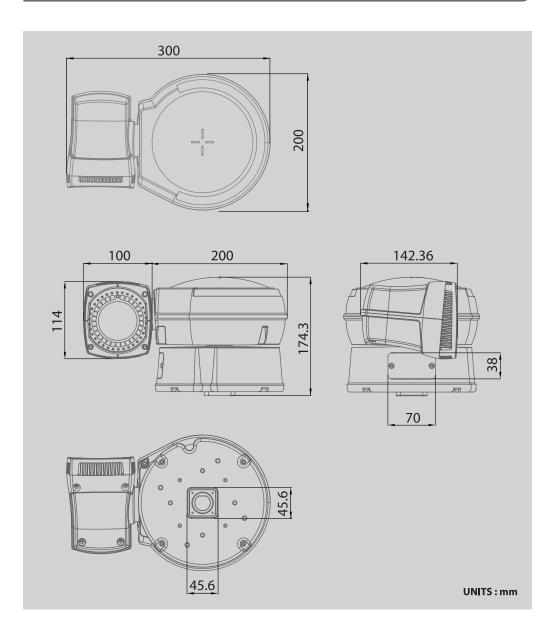
	Model	IR IP MEGAPIXEL PTZ CAMERA
PAN/TILT		
Pan Rotation Angle		0° ~ 360°Endless
Pan Speed		Manual: 0.1~200°/sec (64step), Preset: MAX 300°/sec
Tilt Rotation Angle		0° ~ 360°Endless
Tilt Speed		Manual: 0.1~200°/sec (64step), Preset: MAX 300°/sec
System Accuracy		0.009°
FUNCTION		
Preset		165 Positions (Freeze Preset and AF / MF Preset abailable)
Group Tour		Max. 8 Programmable group tour (each one consisting of up to 60 preset steps with different steps)
Auto Scan		Programable Auto Scan
Pattern		8 Programmable Patterns (total 480 seconds)
Sector		8 Selectable Sectors with 16 characters
Home Position (Recover)		Yes (Auto(recvoer) / Preset / Tour / Pettern / Scan / OFF)
Password Protection		Yes
Privacy Zone		8
Image Stabilizer		No
Recover Origin		Yes
WDR (SSDR)		Yes
DNR (SSNR)		Yes
DSS		On / Off
BLC		On / Off
	HLC	N/A
Day & Night		Auto / Day / Night
Shutter Speed		AUTO / 1/1 ~ 1/25(DSS ON), 1/50 ~ 1/10000
Flickerless		On / Off
Alarm Input		4 alarms (with various programmable states)
Alarm Actions		Activate preset, Group Tour, Pattern or Relay output per alarm input
Aux Output		2 Relay
Auto Flip		Yes (Digital Flip)
OSD Menu		Yes
Communication		RS - 485
Protocol		Pelco D/P
IR Mode		Visual Distance : 50m
POWER		
Power Consumption		AC 24V 2.5A MAX 60W (With Heater)
	Power Supply	AC 24V 50/60Hz 3A (With Heater)
OTHERS		
Construction		Aluminum die casting
Motor Type		Stepping motor (2 Phase)
Micro Steps		1/16 Micro Step
Storage Temperature		-20°C ~ 60°C (-4°F ~ 140°F)
Operating Temperature		-30°C ~ 50°C (-40°F ~ 122°F) 100% humidity.
		The first start-up camera from storage condition over 0°C (32°F)(No Heater)
Certifications		CE, FCC, IP68
CAMERA MODULE		
Image Sensor		1/2.8 Type Exmor CMOS Sensor
Resolution		1920 x 1080p 30fps
	Lens	20x F1.6 ~ F3.5 / f=4.7mm to 94mm
Min. Illumination	Color Mode	0.5Lux(High Sensitivity mode ON/DSS OFF) / 1.7Lux(High Sensitivity mode OFF/DSS OFF) 0.08Lux(High Sensitivity mode ON/DSS ON) / 0.26Lux(High Sensitivity mode OFF/DSS ON)
	ICR-ON Mode	0.095Lux(High Sensitivity mode ON/DSS OFF) 0.3Lux(High Sensitivity mode OFF/DSS OFF) / 0.005Lux(High Sensitivity mode ON/DSS ON)
Lui	minance S/N Ratio	More than 50dB
	Video Output	CVBS 75Ω Terminated

# Dimension



# Memo





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### WE DO **FUTURE**

IR IP MG PTZ CAMERA